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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,906

11/21/2005

David McLeod

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EXAMINER

KITOV, ZEEV V

ART UNIT

PAPER NUMBER

2836

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/522,906

Applicant(s)

MCLEOD ET AL.

Examiner

Zeev Kitov

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/31/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 - 3 and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Freige et al. (US 5,297,000) in view of Fehlhaber (US 6,314,481). Regarding Claim 1, Freige et al. disclose a housing and connectors to the housing (Fig. 6, col. 4, lines 5 - 14). However, it does not disclose an isolation circuitry within the housing. Fehlhaber discloses the isolation circuitry within the housing, such as isolation transformers (see Fig. 1 and 2) located within the housing. It would be obvious to one of ordinary skill in the art at the time the invention was made to have add the isolation transformers of Fehlhaber to the housing of Freige et al., because according to Fehlhaber (col. 1, lines 47 - 55), it is requirement of MIL-STD-1553 standard.

Regarding Claim 2, a Freige et al. connector (see Fig. 6) inherently has a plurality of pins.

Regarding Claim 3, connector pins are inherently adapted for insertion.

Regarding Claim 5, Fehlhaber discloses the isolation element as the isolation transformer (see Fig.1 and 2). A motivation for modification of the primary reference is the same as above.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freige et al. in view of Fehlhaber and Shaffer (US 5,841,778). Shaffer discloses a bus terminator (elements 110 and 160 in Fig. 1) disposed in the housing and electrically coupled to a connector. It would be obvious to one of ordinary skill in the art at the time the invention was made to have add the terminator elements according to Shaffer to the previously rejected system, because as well known in the art, it would prevent the signals reflection from the ends.

Claims 7, 8 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Rudy et al. (US 5,348,482) in view of Fehlhaber. Regarding Claim 7, Rudy et al. disclose following elements of the claim: a junction box (element 10 in Fig.1), a circuit card (see Fig. 10) including plurality of sockets, modular bus coupler is inherently present in such arrangement, a housing (shown in Fig. 5). It further discloses a plurality of pins (shown in Fig. 5) disposed exterior of the housing, which are inherently engageable with some of the sockets. The lacking element of the claim, an isolation circuitry, is disclosed by Fehlhaber (isolation transformers in Fig. 1 and 2). It would be obvious to one of ordinary skill in the art at the time the invention was made to have added the isolation transformers of Fehlhaber to the system of Rudy et al., because according to Fehlhaber (col. 1, lines 47 - 55), it is requirement of MIL-STD-1553 standard.

Regarding Claim 8, Fehlhaber discloses the isolation transformers (see above).


Regarding Claim 10, Fehlhaber discloses an aviation component, since MIL-SRD-1553 standard is the standard specific for an aircraft.

Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rudy et al. in view of Fehlhaber and Shaffer. Regarding Claim 9, Shaffer discloses a bus terminator (elements 110 and 160 in Fig. 1) disposed in the housing and electrically coupled to a connector. It would be obvious to one of ordinary skill in the art at the time the invention was made to have further modify the Rudy system by adding the terminator elements according to teachings of Shaffer, because as well known in the art, it would prevent the signals reflection from the ends.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeev Kitov whose current telephone number is (571) 272 - 2052. The examiner can normally be reached on 8:00 – 4:30. If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272 – 2800, Ext. 36. The fax phone number for organization where this application or proceedings is assigned is (571) 273-8300 for all communications.

Z.K.  
3/30/2007



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